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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,024	09/02/2003	Frederik De Meyer	Q76821	1523

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EXAMINER

HARTMAN JR, RONALD D

ART UNIT	PAPER NUMBER
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2121

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/652,024

Applicant(s)

DE MEYER ET AL.

Examiner

Ronald D. Hartman Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 37-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 37-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112 (maintained)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 23-24, "short-range" is a relative term and one of ordinary skill in the art would not know what actually constitutes short.

As per claim 24, applicant has claimed "Bluetooth" which is a trademark. Trademarks are not to be used in claims since they render the claim indefinite since the products represented by the trademark may change over time, thereby rendering the claim indefinite.

Claim Rejections - 35 USC § 112 (new based on amendment)

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 41, 43-47 and 49-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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As per claim 41, a feature wherein linking information is stored in a management control unit is not believed to be properly supported by the specification, as originally filed, and therefore is believed to represent new matter.

As per claims 43-44, the specification, as originally filed, never specifically disclosed any mention of distance, particularly any mention of "approximately ten meters" or "approximately hundred meters", as claimed by pending claims 43 and 44, and therefore these features contain subject matter that is believed to be representative of new matter.

As per claims 45-46, the applicant has claimed that the installation is "remote" from the control module, but has not provided any indication in the specification, as originally filed, what is meant by this term. Just what exactly constitutes being "remote"? This feature appears to represent new matter.

As per claim 47, the specification, as originally filed, fails to disclose what is meant by "sets up a display", and therefore this feature appears to be representative of new matter.

As per claim 49, determining a type of HMI data to transmit to the mobile control unit is not adequately described by the specification, as originally disclosed. Just what is meant by "type"? There is no way to know since it was never adequately disclosed or described, and therefore appears to represent new matter.

As per claim 50, transmitting different types of data based on whether the technical installation is visible from the location of the mobile control unit is not adequately described by the specification, as originally filed. Furthermore, the examiner is unsure as to what this feature is attempting to convey, is the mobile control unit capable of sight and judging distance based on visual interpretation? These features

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are not adequately described by the specification, as originally filed, and therefore are believed to represent new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 41-47 and 49-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 41, the examiner does not understand what is meant by storing linking information in a management control unit of the installation. What is "the linking information" and where is "the management control unit"?

As per claim 42, "short-range" is a relative term and one of ordinary skill in the art would not know what actually constitutes short.

As per claims 43-44, the applicant has claimed a distance of up to ten or hundred meters, but has failed to disclose what this distance is in relation to? Where is this distance being measured from or in relation to what exactly? The examiner has no way of knowing what is meant by this claim because not only is the specification silent with respect to it, there is no way to accurately gauge what the distance is in relation to. Therefore, any and all art rejections with regards to claims 43 and 44 must be held in abeyance until such time as clear, meaningful claims are presented.

As per claims 45-46, the applicant uses the word "remote" to describe the location of the installation with respect to the mobile operation control unit, but never disclosed in the specification what this term is meant to convey. Therefore, "remote" is a

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relative term and one of ordinary skill in the art would not know what actually constitutes remote.

As per claim 47, the examiner does not know what is meant by "sets up a display". What is this feature intended to convey?

As per claims 49-50, the term "type" is a relative term that renders the claim indefinite. The term "type" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

As per claim 50, the applicant claims transmitting different types of HMI data based on whether the portable control unit is visible to the installation, but the examiner has no idea what this is intended to convey. Visible in relationship to what? Is the applicant attempting to claim that the portable control unit can actually see? Since the examiner cannot make a reasonable interpretation of this claim, any and all art rejections must be held in abeyance until such time that reasonable, clear and meaningful claims are presented with regards to this claim.

Claim Rejections - 35 USC § 102 (maintained)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-12 and 15-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Kretschmann, U.S. Patent No. 6,167,464.

As per claims 1 and 15, and as best understood, these claims appear to provide for a system and method in which a mobile control and monitoring unit's position is detected by way of positioning signals, and when the position is within a control area, of a technical installation, HMI data is loaded into the mobile unit.

These claims appear to be adequately anticipated by Kretschmann, U.S. Patent No. 6,167,464 (e.g. C7 L22-32 and C6 L56-62).

As per claim 2, "display data" has been interpreted to correspond to any data regarding the status or operations of the equipment in the control area, which is displayed on the mobile unit (e.g. C1 L56-65, C6 L46-55 and Figure 8).

As per claim 3, process values representing the display data is adequately disclosed by Kretschmann (e.g. C5 L21-53).

As per claims 5-6, Kretschmann teaches initialization values (e.g. C5 L26-27).

As per claims 7 and 16, and as best understood, Kretschmann adequately discloses the updating of HMI data on the mobile unit (e.g. corresponds to displaying status data; C1 L56-65, C6 L46-55 and Figure 8).

As per claim 8, Kretschmann teaches updating input data (e.g. C1 L56-65, C6 L46-55, C5 L21-53 and Figure 8).

As per claim 9, Kretschmann teaches specified values for the technical installation (e.g. C1 L56-65, C6 L46-55, C5 L21-53 and Figure 8).

As per claim 10, desired values and default values are adequately disclosed by Kretschmann (e.g. C1 L56-65, C6 L46-55, C5 L21-53 and Figure 8).

As per claims 11-12, and as best understood, Kretschmann adequately discloses the transmission of the HMI data since the HMI data may be sent from the central computer to the mobile unit based on the position of the mobile unit (e.g. C7 L22-32).

As per claim 17, Kretschmann adequately discloses that the mobile unit is integrated into the technical installation (e.g. Figures 1 and 2).

As per claim 18, Kretschmann teaches a data bus (e.g. Figure 1 element 16).

As per claim 19, Kretschmann teaches wireless communications (e.g. RF link; Figure 1 element 29).

As per claim 20, Kretschmann teaches a receiver (e.g. Figure 1).

As per claims 21-22, Kretschmann teaches a position-determining device (e.g. GPS; C3 L9).

As per claim 23, Kretschmann teaches a short-range communication mechanism (e.g. RF link; Figure 1 element 29).

As per claim 24, Kretschmann teaches the use of infrared (e.g. C3 L6-7).

Claim Rejections - 35 USC § 102 (new based on amendment)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 37-42 and 45-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Kretschmann, U.S. Patent No. 6,167,464, as applied to claims 1 and 15 above.

As per claims 37 and 39, this claim provides for a feature wherein the portable HMI is assigned to the installation only if the current position is within a regional sub-control area of the installation. This appears to represent a capability that is inherent to Kretschmann since Kretschmann teaches loading pertinent data to the portable HMI when the portable HMI is within the vicinity of a particular machine or piece of equipment, so a proper reading of Kretschmann would lead one to conclude that information is not loaded into the portable HMI when it is not in the vicinity of a pertinent machine or piece of equipment, and therefore it is loaded only when the current position of the portable HMI is within a regional sub-control area of the installation.

As per claims 38 and 40, the same rational as already explained with reference to claim 37, is applied equally herein.

As per claim 41, since the applicant has not provided adequate support for what is meant by storing linking information in a management control unit of the installation, it has been interpreted to correspond to loading data into the portable HMI based on the current position of the portable HMI within the factory, this being a feature adequately anticipated by Kretschmann, as already discussed in sufficient detail above.

As per claim 42, the rejections of claims 19 and 23, from above, are applied equally herein.

As per claims 45-46, it is the examiners opinion that the portable HMI, disclosed by Kretschmann, is remote from the installation (factory) since a proper reading of Kretschmann would lead one to conclude that if the portable HMI is moved about the factory, it must be remote from the machines it is used to monitor and control since the

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portable unit is not physically integrated in to the machine itself and is therefore operated from at least some distance from the machine, thereby forming a remote controlling and monitoring device.

As per claim 47, a feature wherein the display is "set up", as best understood, has been interpreted to correspond to displaying features of the factory on the portable HMI (e.g. status data being displayed; C1 L56-65, C6 L46-55 and Figure 8).

As per claim 48, inputting values to change the operating state of the installation corresponds to Kretschmann teaching the portable HMI being used to monitor and control a factory, as already discussed above.

As per claim 49, as best understood, it appears that the "type" of data transmitted to the portable HMI corresponds to the pertinent information related to a specific piece of equipment or machine that the portable HMI is positioned by, as already discussed above.

Claim Rejections - 35 USC § 103 (maintained)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kretschmann, in view of Official Notice.

As per claim 4, although Kretschmann adequately discloses displaying actual values, Kretschmann does not specifically teach displaying alarm messages. Official Notice is taken with respect to this feature and its incorporation into Kretschmann would have been obvious to one of ordinary skill in the art at the time the invention was made

for the purpose of allowing the operator of mobile unit to know when a problem exists in the technical installation.

In response to the applicant's challenge of the examiner's holding of Official Notice, with respect to this feature, the examiner hereby provides Oberg et al., U.S. Patent No. 7,143,149 which details a system for remotely monitoring and controlling a control system whereby a mobile control unit is used for monitoring and controlling the process, wherein an alarm signal may be sent to the wireless mobile device (e.g. C12 L5-9).

As per claims 13 and 14, Kretschmann does not specifically teach utilizing a mobile telephone or a PDA for the mobile unit.

Official Notice is taken with respect to these features as their incorporation would have been obvious at the time the invention was made for the purpose of allowing a common well known portable communication device to be utilized as the mobile communication conduit, thereby forming a more flexible communication system, and this would also alleviate the need for a dedicated mobile unit to be manufactured or designed for each technical installation since both mobile telephones and PDA's are extremely abundant, relatively cheap, easy to operate and may be procured by practically anyone.

In response to the applicant's challenge of the examiner's holding of Official Notice, with respect to this feature, the examiner hereby provides Oberg et al., U.S. Patent No. 7,143,149 which details a system for remotely monitoring and controlling a control system whereby a mobile control unit may take the form of a PDA or mobile telephone (e.g. C8 L28-42).

Response to Arguments

Applicant's arguments filed on 2/26/2007, with regards to claims 23 and 24, the remarks on page 15 have been fully considered but they are not persuasive.

The Examiner disagrees with the applicant that the term short in "short range" would be known by one of ordinary skill in the art. Once again, in this instance, the term

short is a relative term of distance. There is no way for a person to know what satisfies a short range as opposed to a range slightly larger than short or even long. The applicant is advised to remove the use of this word, as it is not necessary in order to define the scope of what is intended by way of these claims.

Therefore, this rejection is maintained.

Applicant's arguments filed on 2/26/2007, with regards to claim 24, the remarks on page 15 have been fully considered but they are not persuasive.

Since the Bluetooth standard may change over time, for whatever reason, the claim is indefinite. That is, for the same reason that Windows is indefinite, because many changes to this standard have been created (e.g. Windows 3.1, Windows 95, Windows XP, etc.), thereby changing what is meant by Windows, the same can be said for how the Bluetooth standard may change over time. For example, there may be a Bluetooth 3.0 or 4.0 that may include features that were never considered when the Bluetooth of today was utilized.

Furthermore, as to the applicants assertion that since 800 patents have issued using this term in the claims, the Examiner should just look the other way and remove the rejection, the Examiner would simply like to say that just because others have done something wrong, regardless of the number, does not mean that it is acceptable to do it again. Bluetooth should be removed from the claims.

Therefore, this rejection is maintained.

Applicant's arguments filed on 2/26/2007, with regards to claims 1 and 15, and with reference to the outstanding rejections formed under 35 U.S.C. 102(b) using Kretschmann, the remarks made on pages 16-17 have been fully considered but are not persuasive for the following reason(s):

The applicant asserts that Kretschmann does not teach using a HMI for control, but rather only teaches using the portable HMI for monitoring functions.

The examiner respectfully disagrees. Applicants attention is directed towards C1 L48-60, wherein the use of several HMI's, located within a factory, are used for

controlling the process (e.g. "to allow operators to input data to control process from these different locations.)(Emphasis added).

Therefore, this rejection is maintained.

Applicant's arguments filed on 2/26/2007, with regards to claim 7, on page 18 have been fully considered but they are not persuasive.

As per claim 7, the applicant asserts that information is not uploaded to the portable HMI for controlling the process. As already mentioned above, with regards to claims 1 and 15, the examiner believes control to be adequately disclosed by Kretschmann.

Therefore, this rejection is maintained.

Applicant's arguments filed on 2/26/2007, with regards to claim 11, on page 18 have been fully considered but they are not persuasive.

As best understood, claim 11 provides for a feature wherein data is transferred to the HMI based on the position of the HMI. This feature is adequately disclosed by Kretschmann, specifically in C2 L51-60.

Therefore, this rejection is maintained.

Applicant's arguments filed on 2/26/2007, with regards to claim 16, on page 19 have been fully considered but they are not persuasive.

The outstanding Office Action spoke to this claim by explaining that, as best understood, it would appear this claim provides for a feature wherein data would be relayed to the portable HMI based *on the current operations of the system*. Clearly this is a capability that is inherent to Kretschmann since at the very least this feature is anticipated by loading data for different machines when the portable HMI is moved from one machine to another or by providing status details relevant to the operations of specific machines. The applicant has not provided any specific definition for what is meant by cyclically and therefore it is completely open to interpretation.

Therefore, this rejection is maintained.

Applicant's arguments filed on 2/26/2007, with regards to claims 4, 13 and 14, found on page 19 have been fully considered. The applicant has challenged the Examiners holding of Official Notice and has asked for references to be provided. In response, the examiner has provided Oberg et al., U.S. Patent No. 7,143,149 to support the holding of Official Notice for claims 4, 13 and 14; more specifically, for a feature wherein the mobile control unit is a mobile telephone or a PDA, and wherein the mobile control unit displays alarm messages related to the operations of the installation.

Therefore, these rejections are maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D. Hartman Jr. whose telephone number is (571) 272-3684. The examiner can normally be reached on Mon.-Fri., 11:00 - 8:30 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronald D Hartman Jr.

Patent Examiner

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April 16, 2007

RDH

x ADH